



# DNA-PKcs mouse mAb

<b>Catalog No</b>	BYab-00094
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human
<b>Applications</b>	WB;IP;ICC;IHC
<b>Gene Name</b>	prkdc
<b>Protein Name</b>	
<b>Immunogen</b>	Purified recombinant human DNA-PKcs protein fragments expressed in E.coli
<b>Specificity</b>	This antibody detects endogenous levels of DNA-PKcs and does not cross-react with related proteins.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Monoclonal, Mouse
<b>Purification</b>	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	wb 1:1000 icc 1:100
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	DNA dependent protein kinase catalytic subunit;DNA PKcs;DNA-dependent protein kinase catalytic subunit;DNA-PK catalytic subunit;DNAPK;DNPK1;hyper radiosensitivity of murine scid mutation, complementing 1;HYRC;HYRC1;p350;p460;PRKDC;PRKDC_HUMAN;protein kinase, DNA activated, catalytic polypeptide;XRCC7.
<b>Observed Band</b>	450kD
<b>Cell Pathway</b>	Nucleus . Nucleus, nucleolus .
<b>Tissue Specificity</b>	Brain,Cervix carcinoma,Epithelium,Fetal lung,Placen
<b>Function</b>	catalytic activity:ATP + a protein = ADP + a phosphoprotein.,enzyme regulation:Inhibited by wortmannin. Activity of the enzyme seems to be attenuated by autophosphorylation.,function:Serine/threonine-protein kinase that acts as a molecular sensor for DNA damage. Involved in DNA nonhomologous end joining (NHEJ) required for double-strand break (DSB) repair and V(D)J recombination. Must be bound to DNA to express its catalytic properties. Promotes processing of

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hairpin DNA structures in V(D)J recombination by activation of the hairpin endonuclease artemis (DCLRE1C). The assembly of the DNA-PK complex at DNA ends is also required for the NHEJ ligation step. Required to protect and align broken ends of DNA. May also act as a scaffold protein to aid the localization of DNA repair proteins to the site of damage. Found at the ends of chromosomes, suggesting a further role in the maintenance of

**Background**

This gene encodes the catalytic subunit of the DNA-dependent protein kinase (DNA-PK). It functions with the Ku70/Ku80 heterodimer protein in DNA double strand break repair and recombination. The protein encoded is a member of the PI3/PI4-kinase family.[provided by RefSeq, Jul 2010],

**matters needing attention**

Avoid repeated freezing and thawing!

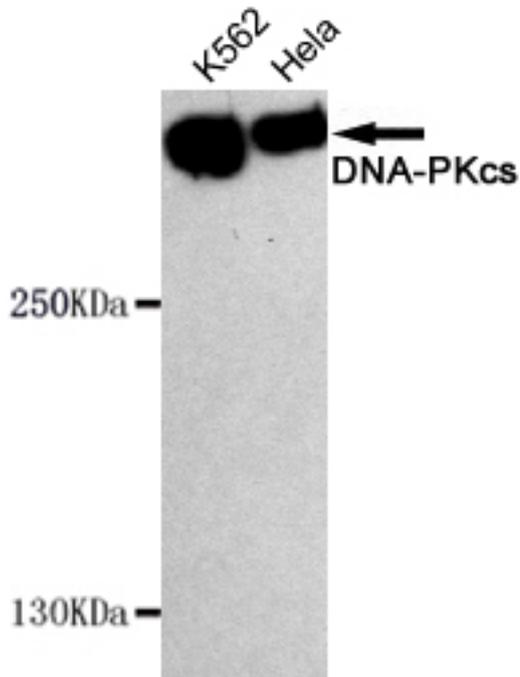
**Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

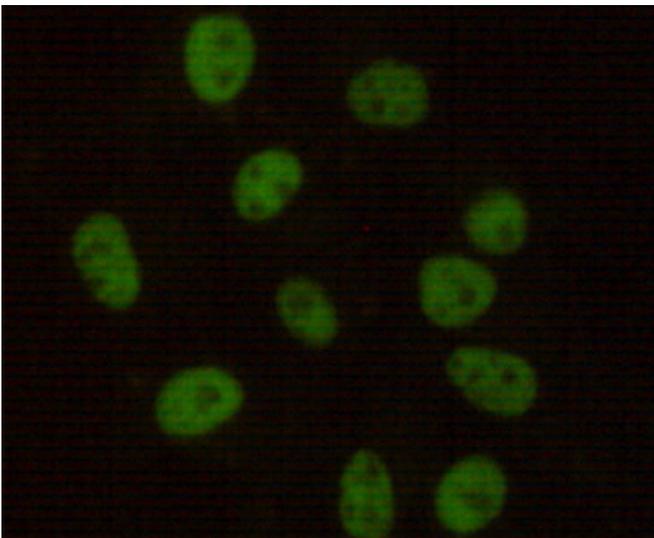
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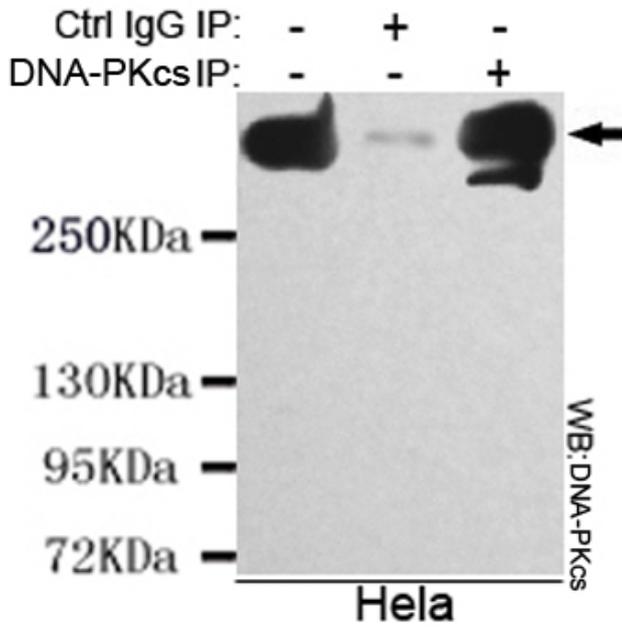
## Products Images



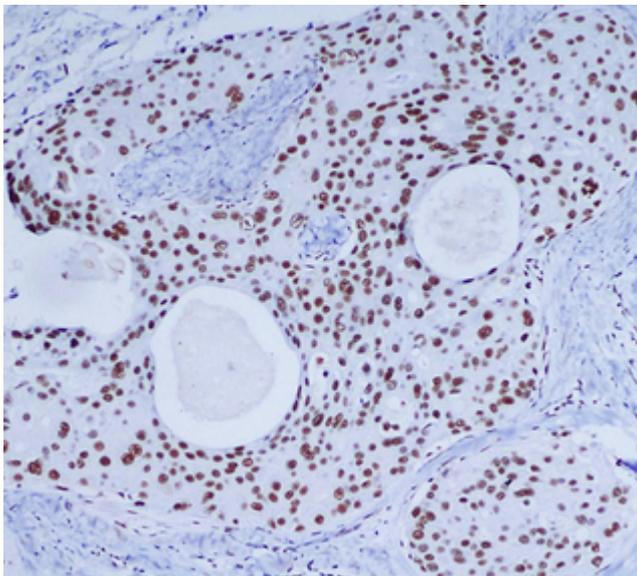
Western blot detection of DNA-PKcs in HeLa and K562 cell lysates using DNA-PKcs mouse mAb (1:1000 diluted). Predicted band size: 450KDa, Observed band size: 450KDa.



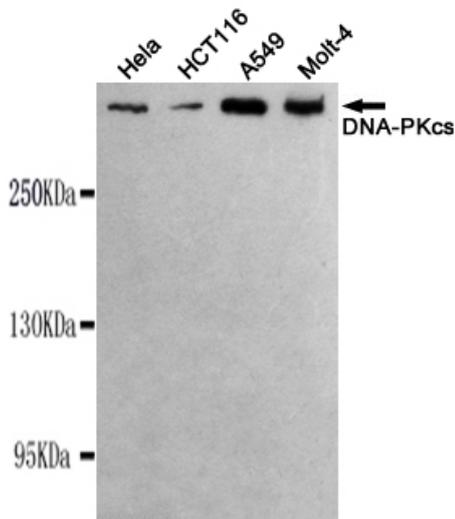
Immunocytochemistry stain of HeLa using DNA-PKcs mouse mAb (1:100).



Immunoprecipitation analysis of HeLa cell lysate using DNA-PKcs mouse mAb.



Immunohistochemical analysis of paraffin-embedded Breast cancer using DNA-PKcs mouse mAb (1/200 dilution). Antigen retrieval was performed by pressure cooking in citrate buffer (pH 6.0).



Western blot detection of DNA-PKcs in HeLa, Molt-4, A549 and HCT116 cell lysates using DNA-PKcs mouse mAb (1:1000 diluted). Predicted band size: 450KDa. Observed band size: 450KDa.

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